NEW SPECIES AND VARIETIES OF NORTH AMERICAN CASSIDINI (COLEOPTERA, CHRYSOMELIDAE).

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In comparison with Central America or even Europe the Cassidini are poorly represented in North America and with the exception of *Metriona ormondensis* Blatch., which possibly is only a variety of *purpurata*, no new species have been discovered within recent years. The only additions to our fauna have been several known European, Central American and Cuban species. Recently however, Mr. H. P. Loding, of Mobile, Alabama, sent me with some other Chrysomelidæ for examination and identification a number of Cassidini amongst which I was surprised to find three distinct new species. These together with notes on some known species are described below, also some varieties of species which seemed to me to be distinct enough to be entitled to a separate name.

Chelimorpha phytophagica Crotch.

This is a distinct species and not a variety of cassidea. The elytra are distinctly pubescent with short, erect hairs and the prothorax more or less so; the elytral epipleuræ are more distinctly visible and at apex horizontal and rather wide and the prothorax and elytra are more shining and more coarsely punctate. It is also shorter and a little more convex than cassidea with the same markings, though in one male the four spots on prothorax and the basal and umbonal spots of elytra are only present.

Crotch did not mention the pubescence of elytra in his description but it is plainly visible in his types.

Judging from the description the Mexican *rugicollis* Champ. seems to be very close to *phytophagica*, though the sculpture of the prothorax in the two is apparently different.

It occurs in Arizona and Texas.

The other varieties, with perhaps the exception of *lewisi*, look distinct but do not seem to have strong enough characters, like *phytophagica*, to be accepted as good species.

Chelimorpha cassidea lewisi Crotch.

I have no specimens of this form before me, which was described from New Mexico, and though I have seen the types in Cambridge did not make any notes. However, quoting from memory alone, *lewisi* is apparently very similar to *cassidea* in size, form and markings, except that the under side and legs are more or less pale. The color is yellowish.

Chelimorpha cassidea geniculata Boh.

This Cuban insect is apparently not uncommon in Southern Florida. It is slightly more elongate and generally a little less convex than *cassidea* with the elytra duller and the spots always smaller; the underside mostly black, femora and tibiæ reddish but the former at apex and the latter at base more or less black; the elytral epipleuræ are narrow at apex as in *cassidea*.

Chelimorpha cassidea 17-punctata Say.

This form is narrower, more elongate and less convex than cassidea or geniculata with the underside and legs more or less pale and the black spots on elytra small. The elytral epipleuræ are narrow at apex as in cassidea. To this form I refer two specimens from Colorado, which agree with Say's description.

Physonota unipunctata quinquepunctata Melsh.

This form seems to be entitled to recognition. It has the elytra more broadly explanate in basal half than *unipunctata* and prothorax generally with three black spots and a more or less distinct spot on each elytral umbo.

Physonota unipunctata arizonae, new variety.

Larger than unipunctata, form more like var. quinquepunctata with relatively slightly smaller prothorax and underside and legs entirely pale. Length: 11 mm.

Tuczon, Arizona (O. Dietz).

Coptocycla repudiata Suffr.

This Cuban insect is reported so far only from Florida but it occurs also in Alabama, where it is taken in the neighborhood of Mobile, by Mr. H. P. Loding.

Coptocycla pinicola, new species.

Form of *Metriona bicolor*, but dull not shining, reddish testaceous with a very faint blackish spot in the scarcely visible discal impression or fovea on each elytron; body below black, head prosternum, ventral segments at sides and narrowly at apex and legs antennæ pale, last four joints black, third joint longer than second, equal to the fourth. Prothorax finely alutaceous, dull or feebly shining basally, laterally broadly rounded and faintly margined. Elytra alutaceous, dull, serial punctures moderate but larger than in *M. bicolor*, lateral margin deflexed and nearly as in *M. bicolor*, lateral marginal bead much stronger than in the latter species; elytral spipleuræ at apex slightly wider and less oblique than in *M. bicolor*. Claws simple, not toothed. Length: 5 mm.

Alabama: Spring Hill (Loding).

A paratype is in Mr. Loding's collection.

Mr. Loding informs me that he takes this species only on pine. From repudiata, the only other species of Coptocycla occurring in North America, pinicola differs in being less convex and less elongate, lateral margin of elytra less deflexed and not punctate—distinctly punctate with numerous moderate punctures in repudiata—the lateral marginal bead stronger, prothorax laterally more broadly rounded and elytral epipleuræ at apex less oblique and slightly wider.

Deloyala clavata diversicollis, new variety.

Generally larger and paler in coloration than typical *clavata*; the large median, prothoracic spot at base generally much paler or occasionally almost absent but then two small, dark, subquadrate spots remain at base; the surface of prothorax duller than in typical *clavata* without or with very small, shining basal space. Length: 7.5 mm.

Texas: New Braunfels and Brownsville; Arizona: Prescott and Huachuca Mts.

Metriona bicolor floridana, new variety.

Larger and broader than typical bicolor with the hyaline lateral margins of elytra wider and less deflexed; lateral impressions of elytra below the

umbo and discal fovea on each elytron relatively larger; color uniformly yellowish-testaceous above without black spots in the impressions; body below black, ventral segments at sides and apex of last narrowly pale; legs either entirely pale, or all the femora partly black. Length: 6.5 mm.

Florida: Miami (Dietz, Engelhardt); Orange Grove (Seiffert); Tampa (Engelhardt).

The larger size, more broadly expanded and less strongly deflexed lateral margins give this form a distinct appearance, but it does not seem to have strong enough characters to make it more than a variety of bicolor. This form is apparently closely allied to the Central American bifossulata and trisignata, but I could not satisfactorily identify either of the two with the above described insect.

Metriona marginepunctata, new species.

Yellowish or reddish-testaceous, elytra without black spots; underside and base of middle and hind femora black; anterior legs and hind tibiæ pale; last four joints of antennæ black, the preceding joints pale. Form of bicolor but larger and more convex, hyaline margin of elytra more deflexed and distinctly punctate, lateral marginal bead stronger, lateral impression below the umbo and discal fovea on each elytron very faint. Length: 6.5 mm.

Alabama: Spring Hill, May (H. P. Loding).

This species is of the size of the var. *floridana* described above, but the hyaline margin of elytra is less broadly expanded and more deflexed, the surface of which is distinctly punctate—impunctate in *floridana*—the lateral marginal bead of elytra is stronger and the rather deeply impressed discal and lateral foveæ of the latter are absent in *marginepunctata*.

A paratype in Mr. Loding's collection agrees in everything with the type but a third specimen, which has been collected in 1908, has the lateral margin of elytra and prothorax scarcely translucent, but otherwise has all the characters of the other two specimens.

Metriona lodingi, new species.

Color reddish-testaceous, body below black head, ventral segments at sides and apex pale, form of *bicolor* but more convex, elytra dull, not shining, the serial punctures larger, the lateral bead of elytral margin stronger, especially at or near middle, the elytral epipleuræ at apex less oblique and nearly horizontal. The prothorax is dull, especially at sides. Length: 5.5 mm.

Alabama: Chunchula, April; Spring Hill, March, Sales Nov., all collected by Mr. H. P. Loding, to whom this new species is dedicated with pleasure and of which a paratype is in his collection.

Of all the known North American species of the genus *Metriona*, *M. bicolor* is the only one with which *lodingi* possibly could be confused, from which, however, the short description will readily distinguish it. It looks very much like *Coptocycla pinicola* described above, but that species has simple claws, is less convex, the prothorax laterally more broadly rounded and has the lateral marginal bead of elytra still a little stronger.

DISTRIBUTIONAL RECORDS OF COMSTOCK'S MEALY BUG IN NEW JERSEY

In a recent report on the "Biology and Control of Comstock's Mealy Bug on the Umbrella Catalpa," published as technical bulletin 29 of the Virginia Agricultural Experiment Station, Dr. W. S. Hough mentions its occurrence in New Jersey. As the species (Pseudococcus comstocki Kuw.) is not recorded in Smith's "Insects of New Jersey," a letter to Dr. Hough asking for definite locality records brought forth the information that according to the records of the Federal Bureau of Entomology, the species had been reported as follows: Bayonne, 1921, on umbrella tree and weeping mulberry; New Brunswick, 1920, on umbrella tree; Jersey City, 1918, on honeysuckle. After his bulletin was in press, Dr. Hough was informed that the species existed also at Asbury Park. To the above can be added another locality, Highland Park, August, 1925, on Catalpa bungei. Quite a severe infestation was noted on several trees, the bugs being very plentiful on the branches and lower leaf surfaces.— H. B. Weiss.